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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,607	04/25/2005	Marianna Vuorikari	0365-0626PUS1	4388
2292	7590	12/15/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			TESKIN, FRED M	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 12/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/532,607	Applicant(s) VUORIKARI ET AL.	
	Examiner Fred M. Teskin	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>042505</u> . | 6) <input type="checkbox"/> Other: ____. |

The preliminary amendment of April 25, 2005 has been entered. Claims 1-14 are currently pending and under examination.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the following grounds for indefiniteness apply to the indicated claims.

(A) Claim 1 provides the limitation to “the receiving vessel ...” (see, penultimate line), which lacks clear precedent in the claim.

(B) Claim 2 is ambiguous in the recitation “30 to 55 %, *preferably* 40 to 52 % ...”. The ambiguity arises from the recitation of broad and narrow ranges for the same parameter in the same claim. A broad limitation followed by linking terms (e.g., in particular, preferably, such as, etc.) and then a narrow limitation within the broad limitation is considered to create indefiniteness since the resulting claim does not clearly set forth the metes and bounds of the protection desired.

(C) Claims 7, 10 and 12 are ambiguous due to the presence of the linking terms “preferably” and (in claims 7 and 12) “in particular”. The ambiguity is based on the same reasoning as stated in the preceding paragraph.

(D) Claim 6 provides the limitation to “the overflow”. There is insufficient antecedent basis for this limitation in the claim. Note that the recitation in claim 4 of “an overflow” cannot be relied upon to cure this antecedent basis problem, since claim 6 does not incorporate through dependency (direct or indirect) the limitations of claim 4.

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(E) Claims 7, 8 and 14 also are indefinite due to insufficient antecedent basis for the limitations "the underflow", "the hydrocyclone" and "the overflow". Earlier recitations of this subject matter in claims 3 (hydrocyclone) and 4 (underflow and overflow) cannot be relied upon to cure this antecedent basis problem, since none of claims 7, 8 and 14 incorporates through dependency the limitations of claim 3 or 4.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Harlin et al and Marissal et al are pertinent to the use of a flash separator to treat the product of a slurry/loop reactor. Foster is pertinent to a multi-state copolymerization process wherein polymer slurry from a pipe-loop reactor is passed to a cyclone separator wherein fines are retained as overflow and a coarse slurry then passed to a gas phase fluidized solids reactor. None of the cited art teaches or suggests providing concentrated slurry to a high pressure flash unit wherein the receiving vessel operates at a pressure of 10 to 30 bar, and the operating pressure of the flash unit is higher than the pressure in the gas phase reactor.

Claims 1-14 are allowable in substance over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

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A process for producing olefin polymers wherein a polymer slurry withdrawn from a loop reactor is concentrated prior to being conducted to a high pressure flash unit, wherein the receiving vessel of the flash unit is operated at a pressure of 10 to 30 bar and the operating pressure of the flash unit is higher than the pressure in a subsequent gas phase reactor, is not taught nor fairly suggested by any prior art documents located or identified to date.

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/12-09-05



FRED TESKIN
PRIMARY EXAMINER
12/9